The status of Claims in the Application is as follows:

CLAIMS:

1. – 40. (CANCELLED)

41. (CURRENTLY AMENDED) A method of [~~revascularizing~~] volumetric removing of tissue from a portion of a patient's myocardium comprising:

positioning an active electrode terminal in close proximity to a target site on a wall of the patient's heart in the presence of an electrically conductive fluid;

inducing a discharge of energetic electrons and photons at said active electrode by [~~and~~] applying a sufficient high frequency voltage to the active electrode terminal and a return electrode~~,~~;

directing the energetic electrons and protons [~~the high frequency voltage being sufficient~~] to volumetrically remove tissue at the target site.

42. (CANCELLED) ~~The method of claim 41 further comprising applying high frequency voltage between the electrode terminal and a return electrode, the high frequency voltage being sufficient to volumetrically remove tissue at the target site~~.

43. (CURRENTLY AMENDED) The method of claim 41 further comprising advancing at least a surface of the active electrode terminal into a space vacated by the removed tissue.

44. (CURRENTLY AMENDED) The method of claim 43 wherein the surface of the active electrode terminal is advanced beyond a plane formed by the outer surface of the heart wall.

45. (CURRENTLY AMENDED) The method of claim 41 further comprising applying sufficient high frequency voltage to the active electrode terminal to promote revascularization of myocardial tissue in the region of the target site.

46. (CANCELLED) ~~The method of claim 41 furthercomprising axially translating the electrode terminal to form a channel through at least a portion of the heart wall.~~

47. (PREVIOUSLY PRESENTED) The method of claim 41 further comprising:

introducing at least a distal end of an electrosurgical catheter into the ventricle of the heart; and

positioning the distal end of the catheter in close proximity to the endocardium.

48. (PREVIOUSLY PRESENTED) The method of claim 47 further comprising introducing the electrosurgical catheter through a percutaneous penetration in the patient.

49. (PREVIOUSLY PRESENTED) The method of claim 41 further comprising:

introducing at least a distal end of an electrosurgical probe through an opening in the patient's chest cavity; and

positioning the distal end of the probe in close proximity to the epicardium.

50. (PREVIOUSLY PRESENTED) The method of claim 49 wherein the probe is introduced through an intercostal penetration in the patient.

51. (CURRENTLY AMENDED) The method of claim 41 wherein the positioning step comprises positioning the active electrode terminal ~~[array]~~ including a plurality of electrically isolated active electrode terminals in close proximity to the target site on the wall of the patient's heart.

52. (CURRENTLY AMENDED) The method of claim 41 wherein the active electrode terminal comprises a single active electrode adjacent to a distal end of an electrosurgical probe.

53. (PREVIOUSLY PRESENTED) The method of claim 41 wherein the return electrode is located on an external surface of the patient's body.

54. (CURRENTLY AMENDED) The method of claim 41 wherein the return electrode and the active electrode terminal are both located on an electrosurgical probe.

55. (PREVIOUSLY PRESENTED) The method of claim 41 further comprising controlling the depth of tissue removed from the myocardium.

56. (CURRENTLY AMENDED) The method of claim 41 further comprising locating the electrically conductive fluid between the active electrode terminal and the heart wall.

57. (CURRENTLY AMENDED) The method of claim 42 further comprising locating the electrically conductive fluid between the active electrode terminal and the return electrode and generating a current flow path from the active electrode terminal through the electrically conductive fluid to the return electrode.

58. (PREVIOUSLY PRESENTED) The method of claim 56 wherein the electrically conductive fluid comprises isotonic saline.

59. (CANCELLED) ~~The method of claim 41 further comprising forming a channel within said wall of the patient's heart~~.

60. (PREVIOUSLY PRESENTED) The method of claim 41 further comprising forming a hole within said wall of the patient's heart.

61. (CURRENTLY AMENDED) The method of claim 60[~~46~~] further comprising forming a revascularizing hole [~~channel~~] with a lateral dimension of about 1.5 to 3.0 mm.

62. (CURRENTLY AMENDED) The method of claim 60[~~46~~] further comprising positioning a radially expandable lumenal prosthesis in the hole [~~channel~~] to maintain patency of the hole[~~channel~~].

63. (CURRENTLY AMENDED) The method of claim 60[~~46~~] wherein the hole [~~channel~~] is curved.

64. (CURRENTLY AMENDED) The method of claim 60[~~46~~] wherein the channel has first and second openings on one side of the heart wall, and a substantially U-shape therebetween.

65. (CURRENTLY AMENDED) The method of claim 46 wherein the hole[~~channel~~] has a depth of about 1.0 to about 4.0 cm deep.

66. (PREVIOUSLY PRESENTED) The method of claim 41 further comprising aspirating fluid and/or solid products from the target site.

67. (CURRENTLY AMENDED) A method of revascularizing a portion of a patient's myocardium comprising:

positioning an active electrode terminal in close proximity to a target site on a wall of the patient's heart;

contacting the active electrode terminal with an electrically conductive fluid disposed in a space between the active electrode terminal and the target site;

inducing a discharge of energetic electrons and photons from the conducting fluid by applying a sufficient high frequency voltage to the active electrode terminal and a return electrode;

directing the energetic electrons and protons to the target site [~~and applying high frequency voltage to the electrode terminal, the high frequency voltage being sufficient~~] to promote revascularization of myocardial tissue in a region of the target site by inducing the generation of new vessels in the region of the target site.

68. (PREVIOUSLY PRESENTED) The method of claim 67 wherein blood supply is restored to the myocardial tissue in the region of the myocardium.

69. (PREVIOUSLY PRESENTED) The method of claim 67 wherein revascularization of myocardial tissue is at least partly accomplished by volumetrically removing a portion of the tissue in said region.

70. (PREVIOUSLY PRESENTED) The method of claim 67 wherein revascularization of myocardial tissue is at least partly accomplished by forming a channel within said region of the myocardium.

71. (PREVIOUSLY PRESENTED) The method of claim 67 wherein revascularization of myocardial tissue is at least partly accomplished by forming a hole within said region of the myocardium.

72. (PREVIOUSLY PRESENTED) The method of claim 67 further comprising advancing at least a distal surface of the active electrode terminal into a space vacated by the removed tissue.

73. (PREVIOUSLY PRESENTED) The method of claim 67 further comprising:

introducing at least a distal end of an electrosurgical catheter into the ventricle of the heart; and

positioning the distal end of the catheter in close proximity to the endocardium.

74. (PREVIOUSLY PRESENTED) The method of claim 67 further comprising:

introducing at least a distal end of an electrosurgical probe through an opening in the patient's chest cavity; and

positioning the distal end of the probe in close proximity to the epicardium.

75. (PREVIOUSLY PRESENTED) The method of claim 74 wherein the probe is introduced through an intercostal penetration in the patient.

76. (CURRENTLY AMENDED) The method of claim 67 wherein the positioning step comprises positioning an active electrode array including a plurality of electrically isolated active electrode terminals in close proximity to the target site on the wall of the patient's heart.

77. (CURRENTLY AMENDED) The method of claim 67 wherein the active electrode terminal comprises a single electrode adjacent a distal end of an electrosurgical probe.

78. (CURRENTLY AMENDED) The method of claim 68 further comprising applying high frequency voltage between the active electrode terminal and a return electrode, the high frequency voltage being sufficient to volumetrically remove tissue at the target site.

79. (PREVIOUSLY PRESENTED) The method of claim 78 wherein the return electrode is located on an external surface of the patient's body.

80. (CURRENTLY AMENDED) The method of claim 78 wherein the return electrode and the active electrode terminal are both located on an electrosurgical probe.

81. (PREVIOUSLY PRESENTED) The method of claim 67 further comprising controlling the depth of tissue removed from the myocardium.

82. (CURRENTLY AMENDED) The method of claim 67 further comprising locating electrically conductive fluid between the active electrode terminal and the heart wall.

83. (CURRENTLY AMENDED) The method of claim 78 further comprising locating electrically conductive fluid between the active electrode terminal and the return electrode and generating a current flow path from the active electrode terminal through the electrically conductive fluid to the return electrode.

84. (PREVIOUSLY PRESENTED) The method of claim 67 wherein the electrically conductive fluid comprises isotonic saline.

85. (PREVIOUSLY PRESENTED) The method of claim 70 further comprising forming a channel with a lateral dimension of about 1.5 to 3.0 mm.

86. (PREVIOUSLY PRESENTED) The method of claim 70 wherein the channel has a depth of about 1.0 to about 4.0 cm deep.

87. (PREVIOUSLY PRESENTED) The method of claim 70 further comprising aspirating fluid and/or solid products from the target site.

88. -119. (CANCELLED)